

## **Thermodynamic Properties of n-Alkanes in the Critical Region**

A. Abbaci  
*Faculté des Sciences*  
*Department of Chemistry*  
*B.P. 12*  
*Université de Annaba*  
*Annaba, Algeria*

We present an equation of state that describes the thermodynamic properties of n-alkanes as a function of the acentric factor in the critical region as well as in the classical region. This equation is based on the theory of the renormalization group theory. Specifically, this equation of state takes into account the crossover from critical behavior close to the critical region to the classical region far away from the critical point.